UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/867,200	05/29/2001	Robert H. Scheer	31083.05US3	5897

34018 7590 07/14/2009

GREENBERG TRAURIG, LLP
77 WEST WACKER DRIVE
SUITE 3100
CHICAGO, IL 60601-1732

EXAMINER
BUCHANAN, CHRISTOPHER R

ART UNIT	PAPER NUMBER
3627	

MAIL DATE	DELIVERY MODE
07/14/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT H. SCHEER

Appeal 2009-000418
Application 09/867,200
Technology Center 3600

Decided:[1] July 14, 2009

Before MURRIEL E. CRAWFORD, ANTON W. FETTING, and BIBHU R. MOHANTY, *Administrative Patent Judges*.

MOHANTY, *Administrative Patent Judge*.

DECISION ON APPEAL

---

[1] The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

STATEMENT OF THE CASE

The Appellant seeks our review under 35 U.S.C. § 134 (2002) of the Final Rejection of claims 4-9 which are all the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

SUMMARY OF THE DECISION

We AFFIRM.

THE INVENTION

The Appellant's claimed invention is a method for managing inventory within a supply chain. The method is performed by providing forecasts of the demand for items distributed within the supply chain, using the forecasts to establish base stocking levels and reorder points within the supply chain, and using the established base stocking levels and reorder points to position items within the supply chain so as to maximize efficiency and profitability when responding to an order for an item. (Spec. 3:18-23). Claim 4, reproduced below, is representative of the subject matter of appeal.

> 4. A computer-readable media having computer-executable instructions for managing inventory within a supply chain having a plurality of distribution points, the instructions performing steps comprising:
>
> providing for each of a plurality of items distributed within the supply chain a forecast of demand over a forecast period;
>
> using the forecast of demand for each of the plurality of items to establish for each of the plurality of items a critical stocking ratio what indicates a total quantity of each of the plurality of items which can be held in inventory over the forecast period;

using the critical stocking ratio for each of the plurality of items to apportion the total quantity of each of the plurality of items which can be held in inventory over the forecast period in shares to the plurality of distribution points in the supply chain by assigning over the forecast period a base stock level for each of the plurality of items at each of the plurality of distribution points in the supply chain and a reorder point for each of the plurality of items at each of the plurality of distribution points in the supply chain;

determining a replenishment method for each of the plurality of items at each of the plurality of distribution points in the supply chain; and

executing the replenishment method to create orders for items at any of the plurality of distribution points in the supply chain that fail to have a base stock level for any of the plurality of items thereby causing inventory within the supply chain to be managed in accordance with the critical stocking ratio.

THE REJECTIONS

The Examiner relies upon the following as evidence in support of the rejections:

Caveney	US 5,608,621	Mar. 4, 1997
Tsukishma	US 6,535,773 B1	Mar. 18, 2003

The following rejections are before us for review:

1. Claims 4-9 are rejected under 35 U.S.C. § 103(a) as unpatentable over Caveney and Tsukishma.

THE ISSUE

At issue is whether the Appellant has shown that the Examiner erred in making the aforementioned rejections.

This issue turns on whether Caveney and Tsukishma together disclose "using the critical stocking ratio for each of the plurality of items to apportion the total quantity of each of the plurality of items which can be held in inventory over the forecast period in shares to the plurality of distribution points in the supply chain" as claimed in claim 4.

FINDINGS OF FACT

We find the following enumerated findings of fact (FF) are supported at least by a preponderance of the evidence:[2]

FF1. Caveney discloses a method for controlling the number of units of parts in an inventory (Title). The system uses a computer to forecast data and optimize the number of units of each part in the inventory (Abstract).

FF2. Caveney discloses that in order to determine the minimum replenishment quantity and the safety unit quantity for each part, the processor determines an expected number of fillable-from-stock orders and a slope for each part's service level (Col. 3:26-30).

FF3. Tsukishma discloses a method for calculating the required quantity of material (Title). Material/quantity requirements planning method (MRP) arithmetic units are disposed in parallel for determining items and quantities required for the production schedule (Abstract). Figure 1 shows the MRP units in parallel.

FF4. Tsukishma discloses that the arithmetic unit 34 determines inventory allotment, lot arrangement, and lead time as parts of the MRP arithmetic

---

[2] *See Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Patent Office).

procedure and that the expansion module 23 is designed to arithmetically determine or calculate the required quantities of the child-items, respectively, on the basis of the net required quantity of the parent item (Col. 7:40-48).

FF5. Tsukishma discloses that for each item a 1) total required quantity is calculated, 2) a net required quantity is calculated, and 3) a lot arrangement is calculated (Col. 1:61-Col. 2:5).

PRINCIPLES OF LAW

> Section 103 forbids issuance of a patent when "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains."

KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). *See also KSR*, 550 U.S. at 407 ("While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.") In *KSR*, the Supreme Court emphasized "the need for caution in granting a patent based on the combination of elements found in the prior art," *id.* at 415-16.

ANALYSIS

The Appellant argues the rejection of claim 4 is improper because Tsukishima fails to disclose the claimed limitation of "*using the critical stocking ratio for each of the plurality of items* to *apportion the total quantity of each of the plurality of items* which can be held in inventory over the forecast period *in shares to the plurality of distribution points* in the supply chain" (Br. 5). The Appellant argues that Tsukishima merely discloses the "allotting" items to one of the plurality of processor elements (Br. 5-6, Reply Br. 3-4).

In contrast, the Examiner has determined that Caveney uses a critical stocking ratio to derive the total amount of inventory and that Tsukishima discloses distributing the total amount of inventory into allotments as part of a material requirements planning (MRP) system. (Ans. 8[3]).

We agree with the Examiner. Caveney discloses determining the minimum replenishment quantity and the safety unit quantity for each part (FF2) and this may be considered a "critical stocking ratio" as claimed. Tsukishma discloses that the arithmetic unit 34 determines inventory allotment and lot arrangement as part of the material requirements planning (MRP) arithmetic procedure and that the expansion module 23 determines the required quantities of the child-items, respectively, on the basis of the net required quantity of the parent item (FF4) which serves to "apportion the total quantity of each of the plurality of items" as claimed. The Appellant's argument that processing is "allotted" among the plurality of processing

[3] We note that the Examiner's Answer does not have sequential page numeration (for example there are three separate pages each numbered "2." This Decision refers to the actual sequential number of each page in the Examiner's Answer starting from "1" and ending at "9."

elements in Tsukishma neglects what these processing elements actually calculate which includes the "inventory allotment" (FF4) which serves as "apportioning" of the "items" as claimed. Tsukishma has disclosed that for each item the system calculates the total required quantity, the net required quantity, and lot arrangement (FF5).

For these reasons the rejection of claim 4 is sustained. The Appellant has not argued separately for dependent claims 5-9 and the rejection of these claims is sustained for the same reasons given above.

CONCLUSIONS OF LAW

We conclude that Appellant has failed to show that the Examiner erred in rejecting claims 4-9 under 35 U.S.C. § 103(a) as unpatentable over Caveney and Tsukishma.

DECISON

The Examiner's rejection of claims 4-9 is sustained.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED

Appeal 2009-000418
Application 09/867,200

hh

GREENBERG TRAURIG, LLP
77 WEST WACKER DRIVE
SUITE 3100
CHICAGO, IL 60601-1732